



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/540,504

12/14/2005

Peter Hauri

P27233

6644

40401 7590 03/25/2008
HersHKovitz & Associates, LLC
2845 Duke Street
Alexandria, VA 22314

EXAMINER

MERLINO, ALYSON MARIE

ART UNIT

PAPER NUMBER

3673

NOTIFICATION DATE

DELIVERY MODE

03/25/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@hershkovitz.net
patent@hershkovitz.net

Office Action Summary	Application No. 10/540,504	Applicant(s) HAURI, PETER	
	Examiner ALYSON M. MERLINO	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 2, it is improper to reference the claims within the specification.

Appropriate correction is required.

Claim Objections

2. Claim 26, 29, and 34 are objected to because of the following informalities:
 - a. In regards to claim 26, lines 4-8 of the claim are grammatically incorrect, making the language confusing.
 - b. In regards to claim 29, line 5, the word "condition" should be "conditions."
 - c. In regards to claim 34, line 4, the phrase "a first coupling condition" should be "the first coupling condition" since this limitation is recited in claim 19.
 - d. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 26 and 30-35 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. **In regards to claim 26**, it is unclear what applicant is intending to claim with the phrase "by way of mechanical action." For examination purposes, the claim will be given a broad interpretation.

6. **In regards to claim 30-35**, it is unclear whether applicant intends to claim the locking device in combination with a lock cylinder or a door handle arrangement or just for use with these devices. For examination purposes, it will be considered that the locking device is used in combination with a lock cylinder and in combination with a door handle arrangement until further clarification from applicant.

7. **In regards to claims 34 and 35**, it is unclear with respect to which component the drove-off element is not blocked in lines 4 and 5 of claim 34. For examination purposes, the claim will be given a broad interpretation until further clarification from applicant.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 19, 20, 22-24, 27-29, 34, and 36 are rejected** under 35 U.S.C. 102(b) as being anticipated by Liu (US-4995248).

10. In regards to claim 19, Liu discloses a locking device including a housing 3 and a rotor 43, with the locking device comprising a coupling element 441 and an electronically controlled drive 47 connected to the housing. Liu further discloses that the drive includes an advance element 471, and that the drive is operable to move the coupling element by way of moving the advance element (Col. 4, lines 41-57), and to thereby bring the locking device into a first (Figure 6) and into a second (Col. 4, lines

41-57) coupling condition. Liu also discloses a drive-off element 42 for actuating a locking bar 48, wherein in the first coupling condition, the coupling element is positioned such that the rotor is not coupled to the drive-off element (apparent from Figure 6), and wherein in the second coupling condition, the coupling element is positioned such that it couples the drive-off element to the rotor (Col. 4, lines 41-57). Liu discloses that the coupling element is decouplable from the drive in a manner that in the second coupling condition it is movable away from the advance element by way of a rotational movement of the rotor (apparent from Col. 4, lines 41-57 and the position of the drive-off element shown in shadow in Figure 6).

11. **In regards 20**, Liu discloses that the coupling element has an at least partly spherical surface (surface just below the indicator associated with reference character 441, Figure 6).

12. **In regards to claim 22**, Liu discloses that the coupling element is neither fixedly coupled to the housing nor fixedly coupled to the rotor (apparent from the free movement of the element in Figure 6 and Col. 4, lines 41-57).

13. **In regards to claim 23**, Liu discloses that the coupling element in its second coupling position given a rotational movement of the rotor is rotated in an opening 433, 425 which is formed by recesses in the rotor and in the drive-off element (Figures 4 and 6).

14. **In regards to claim 24**, Liu discloses that the coupling element and the advance element are couplable to each other by a ferromagnetic interaction (Col. 4, lines 41-57).

15. **In regards to claim 27**, Liu discloses that in the first coupling condition the drive-off element is blocked with respect to the housing (the drive-off element does not actuate the locking bar, and is therefore blocked with respect to the housing) and in the second coupling condition the drive-off element is not coupled to the housing (the drive-off element is free to move with respect to the housing).

16. In regards to claim 28, Liu discloses that in the first coupling position the coupling element blocks the drive-off element with respect to the housing (the coupling element does not couple the drive-off element to the rotor which does not allow it to actuate the locking bar).

17. **In regards to claim 29**, Liu discloses that in the first coupling position a blocking element 442 blocks the drive-off element with respect to the housing (does not allow the drive-off element to actuate the locking bar), wherein the blocking element and the coupling element are arranged such that a movement of the blocking element on transition between the first and the second conditions causes a movement of the coupling element (Col. 4, lines 41-57).

18. **In regards to claim 34**, Liu discloses the locking device for use with a door handle or door knob (Figure 3), wherein the rotor may be coupled to an outer door handle 11 (Figure 3), and wherein the drive-off element is couplable to an inner door handle or door knob 21 (Figures 3 and 4), and the coupling element in the first coupling condition is arranged such that the drive-off element is not blocked (drive off element is allowed to rotate, but does not actuate the locking bar, Figure 6).

19. **In regards to claim 35**, Liu discloses a channel 324, 325 formed in a region of the housing (Figure 2) which guides the drive-off element (Figures 3 and 5), in which channel the coupling element is movable by way of rotation of the drive-off element when it is located in the first coupling condition (when coupling element is moved from the second coupling condition to the first coupling condition, the drive-off element needs to be rotated to allow the coupling element to be movable into channel portion 325 in the first coupling condition, Figure 3).

20. **In regards to claim 36**, Liu discloses an intermediate element 442 with an at least partly spherical surface (Figures 4 and 6), which is arranged between the advance element of the drive and the coupling element (Figure 6).

21. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

22. **Claims 19, 20, 22, 23, 27, 28, 30, and 31 are rejected** under 35 U.S.C. 102(b) as being anticipated by Aramburu et al. (US Pub. No. 2002/0139156 A1).

23. **In regards to claim 19**, Aramburu et al. discloses a locking device including a housing 3 and a rotor 2, with the locking device comprising a coupling element 5 and an electronically controlled drive (Paragraph 52, lines 30-32) connected to the housing. Aramburu et al. further discloses that the drive includes an advance element 7, and that the drive is operable to move the coupling element by way of moving the advance element (apparent from Figures 6 and 7), and to thereby bring the locking device into a

first (Figure 6) and into a second (Figure 7) coupling condition. Aramburu et al. also discloses a drive-off element 1 for actuating a locking bar (apparent from use with locks in Paragraph 5), wherein in the first coupling condition, the coupling element is positioned such that the rotor is not coupled to the drive-off element (apparent from Figure 6), and wherein in the second coupling condition, the coupling element is positioned such that it couples the drive-off element to the rotor (apparent from Figure 7). Aramburu et al. discloses that the coupling element is decouplable from the drive in a manner that in the second coupling condition it is movable away from the advance element by way of a rotational movement of the rotor (apparent from Figures 11 and 12).

24. **In regards 20**, Aramburu et al. discloses that the coupling element has an at least partly spherical surface (surface just below the indicator associated with reference character 5, Figure 6).

25. **In regards to claim 22**, Aramburu et al. discloses that the coupling element is neither fixedly coupled to the housing nor fixedly coupled to the rotor (apparent from the free movement of the element in Figures 6 and 7).

26. **In regards to claim 23**, Aramburu et al. discloses that the coupling element in its second coupling position given a rotational movement of the rotor is rotated in an opening which is formed by recesses in the rotor and in the drive-off element (apparent opening surrounding the coupling element in Figure 11).

27. **In regards to claim 27**, Aramburu et al. discloses that in the first coupling condition the drive-off element is blocked with respect to the housing (Figure 6) and in

the second coupling condition the drive-off element is not coupled to the housing (drive-off element is coupled to the rotor).

28. **In regards to claim 28**, Aramburu et al. discloses that in the first coupling position the coupling element blocks the drive-off element with respect to the housing (Figure 6).

29. **In regards to claim 30 and 31**, Aramburu et al. discloses that the locking device is for use in a lock cylinder being free of purely mechanically actuatable tumblers or for use in a lock cylinder having mechanical tumblers for engaging into recesses of a key (apparent from Paragraph 5).

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. **Claims 21, 25, and 26 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Liu (US-4995248) in view of Russell et al. (US-6442986).

32. **In regards to claim 21**, Liu discloses the locking device as applied to claims 19 and 20 above, but fails to disclose that the coupling element is ball shaped. Russell et al. teaches a coupling element 533 that is ball shaped. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the coupling element of Liu to be ball shaped, since a change in the shape of a prior art device is a design consideration within the skill of the art.

33. **In regards to claims 25 and 26**, Liu discloses the locking device as applied to claims 19, 20, and 22-24 above with the first coupling condition corresponding to a first coupling position of the coupling element with respect to the rotor (Figure 6) and the second coupling condition corresponding to a second coupling position of the coupling element with respect to the rotor (Col. 4, lines 41-57), but fails to disclose that the drive includes a rotational drive and a travel spindle. Liu also fails to disclose that the drive includes a spring exerting a spring force on the coupling element, such that the coupling element may be moved against the spring force in the direction of the first coupling position by way of mechanical action. Russell et al. teaches a drive including a rotational drive 547, a travel spindle 535, and a spring 592 that are operable to move a coupling element 533 against the spring force. Since the use of a rotational drive, travel spindle, and spring would not hinder the ability of the coupling element to move between the first and second coupling conditions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a drive that is rotational instead of the drive disclosed by Liu to move the coupling element since the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

34. **Claims 32 and 33 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Aramburu et al. (US Pub. No. 2002/0139156 A1) in view of Davis (US Pub. No. 2001/0027671 A1). Aramburu et al. discloses the locking device as applied to claim 19 above, with the locking device for use in a lock cylinder (Paragraph 5), but fails to disclose that the lock cylinder has a key-blocking element which by way of introduction

of a key into a key opening may be moved from a first position into a second position, permitting in the second position a withdrawal of the key only at certain defined alignments of the rotor, and that in its first position the key blocking element blocks the rotor against rotation. Davis teaches a lock cylinder accepting a key, with the lock cylinder including a key-blocking element 126 that may be moved from a first position (position before insertion of key, Paragraph 57) to a second position (position in engagement with key, Paragraph 57), wherein when in the second position the key-blocking element permits a withdrawal of the key only at certain defined alignments of the rotor (Paragraph 57). Davis further teaches that when the key-blocking element is in its first position it blocks the rotor against rotation (key must be fully inserted so that the key-blocking element can move to the second position and allow the key to rotate the rotor, Paragraph 57). Since the inclusion of a key-blocking element would not hinder the ability of the coupling element to move between positions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a key-blocking element in order to enhance the security and safety of the locking device in combination with the lock cylinder.

35. **Claim 37 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Liu (US-4995248) in view of Chen (US-5475996). Liu discloses the locking device as applied to claim 19 above, but fails to disclose that the coupling element includes an insert of ferromagnetic material. Chen teaches a coupling element 34 that is moved between two coupling conditions (Figures 5A and 5B), and has an insert of ferromagnetic material 344. It would have been obvious to one of ordinary skill in the

Art Unit: 3673

art at the time the invention was made to include an insert of ferromagnetic material in the coupling element so that a different drive could be used than the one disclosed by Liu in order to enhance the versatility of the lock.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALYSON M. MERLINO whose telephone number is (571)272-2219. The examiner can normally be reached on Monday through Friday, 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M. M./
Examiner, Art Unit 3673
March 12, 2008

/Patricia L Engle/
Supervisory Patent Examiner, Art
Unit 3673

Application/Control Number: 10/540,504
Art Unit: 3673

Page 12